U.S. Patent Application Serial No. 09/938,729

Attorney Docket No.: 010960

REMARKS

Claims 1-4 are pending in the application.

It is believed that this Amendment is fully responsive to the Office Action dated July 31,

2002.

Drawings

Applicants will submit formal drawings upon receipt of an Official Notice of Allowance.

Specification

The specification has been amended to correct minor informalities. No new matter is added

to the specification. Entry of this Amendment to the specification is respectfully requested.

Objection to the Title

The Examiner has objected to the title as being nondescriptive. Taking the Examiners

comments into consideration, the title of the present invention has been amended. Entry of the

amended title is respectfully requested. Withdrawal of the objection to the title is respectfully

requested.

Summary of the invention

The present invention is a cogeneration type generator apparatus in which an engine (11)

powered by natural (house) gas, or some other fuel, is connected to a generator (12) that is

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connected to an inverter (133) to generate alternating current. This cogeneration type generator apparatus would be utilized in homes to generate electric current when the normal electric power supply fails. When a power failure occurs, the engine (11) is started and the direct current voltage from the generator (12) is monitored using a first fault monitor (40). When the direct current voltage reaches a predetermined level an interconnection is enabled to supply current to the house. Thereafter, a second fault monitor (43) is utilized to monitor the direct current. If the direct current falls below a predetermined value, then the interconnection is closed. If the direct current remains at or below the predetermined value then it is determined that a failure has occurred in the generator (12).

Claim Rejection Under 35 USC §102

Claims 1-4 are rejected under 35 U.S.C. §102(b) as being anticipated by Latos et al. (U.S. Patent No. 5,512,811).

Latos et al. describes an electrical power starter/generator (10) that converts electrical energy from a DC electric power source, such as a battery, to mechanical energy that is utilized to start an auxiliary power unit, such as a turbine engine in an aircraft. A start mode controller (50) is used to control the rate of generation of rotational mechanical energy delivered to the turbine engine. An auxiliary power unit starter/generator relay (94) is commanded to close via a line (96), connecting the aircraft battery (12) to the electric power starter/generator (10), thereby engaging the start sequence. The auxiliary power unit starter/generator relay (94) is commanded to open when the auxiliary power unit engine (82) reaches the cutout speed, thereby completing

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the start sequence. A permanent magnet generator (36) produces polyphase AC electric power when driven by the turbine engine via shaft (14). The electric power starter/generator (10) has an internal power supply (130).

Latos et al. does not describe the following elements recited in independent claim 1.

First, Latos et al. does not describe a means for canceling the interconnection to the DC generator when the DC voltage drops below a second predetermined value. Second, Latos et al. does not describe restarting the interconnection between the DC motor and the rest of the system when the DC voltage returns back to the first predetermined value. Third, Latos et al. does not describe a fault detecting means to determine after the DC voltage remains below the second predetermined value for some time period that there is a fault in the DC generator.

Specifically, Latos et al. does not disclose or suggest the following elements recited in claim 1,

"An engine generator apparatus for rectifying and converting an alternating output of a generator, which has multi-phase windings and is driven by an engine, and converting the rectified output by an inverter into an alternating current at the frequency of a power system and the alternating current is interconnected with the source of said power system, comprising: a means for starting the interconnection with the system source when a direct current voltage rectified rises up to first predetermined level after the start up of the engine and then increasing the output of the inverter; a means for canceling the interconnection when the direct current voltage drops down to below second predetermined level, and for re-starting the interconnection with the system source when the direct current voltage returns back to the first predetermined level; and a fault detecting means for judging that the power generator has a fault when the direct current voltage drops down to below the second predetermined level after the re-starting of the interconnection. (Emphasis Added)

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Therefore, withdrawal of the rejection of Claims 1-4 under 35 U.S.C. §102(b) as being anticipated by Latos et al. (U.S. Patent No. 5,512,811) is respectfully requested.

Conclusion

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

Attached hereto is a marked-up version of the changes made to the title and specification by the current amendment. The attached page is captioned "Version with markings to show changes made."

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In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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GNS/alw

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PATENT TRADEMARK OFFICE

Enclosures: Version with markings to show changes made

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